

CLAIMS:

1. A system for treating a skin target comprising:
 - (a) an applicator containing at least two RF electrodes configured to be applied to the skin, so as to apply an RF current to a skin area located between the electrodes when the applicator is applied to the skin, the skin area containing at least a portion of the target;
 - (b) a temperature effector configured to create a temperature difference between the target and skin surrounding the target such that the target is at a temperature that is at least 5C° higher than the surrounding skin.
- 10 2. The system according to Claim 1 wherein the temperature effector heats the target.
3. The system according to Claim 2 wherein the temperature effector comprises a light source configured to apply optical energy to the target.
4. The system according to Claim 1 wherein the temperature effector cools the surrounding tissue.
- 15 5. The system according to Claim 4 wherein the temperature effector comprises an irrigation unit cooling a fluid and tubes for allowing the cooled fluid to flow near the surrounding skin.
6. A method for treating a skin target comprising:
 - (a) creating a temperature gradient between the target and skin surrounding the target such that the target is at a temperature that is at least 5C° higher than the surrounding skin surface; and
 - (b) applying RF energy to a skin area containing at least a portion of the target.
- 20 7. The method according to Claim 6 wherein the temperature gradient is created by heating the target.
- 25 8. The method according to Claim 7 wherein the target is heated by applying optical energy to the target with an intensity of about 5 to about 100 Joules/cm² for about 1 to 200 msec.

9. The method according to Claim 5 wherein the temperature gradient is created by cooling the skin surrounding the target.

10. The method according to Claim 9 wherein the surrounding skin is cooled by contacting the skin with a pre-cooled fluid.

5 11. The method according to Claim 6 wherein the target is selected from the group comprising a vascular lesion, pigmented lesion, hair follicle, wrinkle and acne.

12. The method of Claim 6 wherein the RF energy has a power level of 5 to 200 W.

10 13. A method for treating a skin target comprising: /

(a) activating a temperature effector to create a temperature gradient between the target and skin surrounding the target such that the target is at a temperature that is at least 5C° higher than the surrounding skin;

(b) terminating the activity of the temperature effector; and

15 15 (c) after said terminating step, applying RF energy to a skin area containing at least a portion of the target.

14. A system for treating a skin target comprising: /

an applicator containing at least two RF electrodes configured to be applied to the skin, so as to apply an RF current to a skin area located between the 20 electrodes when the applicator is applied to the skin, the skin area containing at least a portion to the target;

a temperature effector configured to create a temperature difference between the target and skin surrounding the target such that the target is at a temperature that is at least 5C° higher than the surrounding skin; and

25 a processor coupled to said temperature effector and said RF electrodes and configured to sequentially activate said temperature effector, terminate the activity of said temperature effector, and then activate said RF electrodes.